

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1890	network near10 usage and @py<"2000"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/25 14:23
L2	0	1 and network near10 usage near10 (charge? fee) and (pre?paid prepaid)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/25 14:24
L4	17	1 and network near10 usage and (pre?paid prepaid)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/25 14:45
L5	1	1 and (cellular phone PCS) near10 usage and (pre?paid prepaid)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/25 14:29
L6	61	"705"/\$.ccls. and (cellular phone PCS) near10 usage and (pre?paid prepaid)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/25 14:46
L7	29	1 and network near10 usage and (pre?paid prepaid " <u>electronic</u> payment")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/25 14:56
L8	67	"705"/\$.ccls. and (cellular phone PCS) near10 usage and (pre?paid prepaid " <u>electronic</u> payment")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/25 14:46
L9	17	1 and network near10 usage and (pre?paid prepaid " <u>electronic</u> payment") and <u>calculat</u> \$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/25 14:56

\* Abstract, Date, kwic + tagged for Ref.

4/K,3/1 (Item 1 from file: 9)

DIALOG(R)File 9:Business & Industry(R)  
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1756347 Supplier Number: 01756347 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**STC Sees Strong Demand For Rental Phones**  
**(Thorn Americas and Shares Technologies Cellular have extended agreement**  
**they hope will place more prepaid cellular into users' hands)**  
Wireless Week, p 45+  
February 24, 1997  
DOCUMENT TYPE: Journal ISSN: 1085-0473 (United States)  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 645

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

~~...Customers purchase airtime in 30- or 60-minute increments. Since the~~  
~~intelligent phone tracks the usage, customers appear as "normal" cellular~~  
~~users to the network. This differs from many prepaid carrier services~~  
~~requiring network-based account verification and potential delays.~~  
~~"That's a big advantage over the local carrier..."~~

4/K,3/2 (Item 1 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)  
(c) 2005 The Gale Group. All rts. reserv.

01428972 Supplier Number: 46722851 (USE FORMAT 7 FOR FULLTEXT)  
**Centigram, Priority Call Management Team to Provide PageNet With Integrated**  
**Wireless Communications Solutions; MobileManager Selected After Extensive**  
**60-Day, Side-by-Side Market User and Technology Showdown.**  
Business Wire, p09191060  
Sept 19, 1996  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 815

... single telephone number, such as a subscriber's established pager  
number. Debit Card Service allows **network** operators to provide **prepaid**  
toll calling and basic **network** services to customers.

**Prepaid** Cellular Services monitors all incoming and outgoing  
cellular airtime and debits the **usage** against the subscriber's balance  
that has been paid in advance. It can be offered...

4/K,3/3 (Item 2 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)  
(c) 2005 The Gale Group. All rts. reserv.

01397416 Supplier Number: 46491304 (USE FORMAT 7 FOR FULLTEXT)  
**Centigram Provides Next Generation of MobileManager Applications for**  
**Service Providers; New Features in Prepaid Cellular, Debit Card**  
**Services Meet Needs of Today's Users While Increasing Network Usage.**  
Business Wire, p6251069  
June 25, 1996  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 626

**Centigram Provides Next Generation of MobileManager Applications for Service Providers; New Features in Prepaid Cellular, Debit Card Services Meet Needs of Today's Users While Increasing Network Usage .**

**4/K,3/4 (Item 1 from file: 636)**

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

(c) 2005 The Gale Group. All rts. reserv.

03222550 Supplier Number: 46606471 (USE FORMAT 7 FOR FULLTEXT)

**CARRIERS RECOGNIZE NEED FOR PREPAID SERVICE OFFERING**

Mobile Phone News, v14, n31, pN/A

August 5, 1996

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 706

... to 30 percent of denied applications.

"We truly believe there is a broader market for **prepaid** --those who wish to control **usage** ," said Jim D'Apirle, manager of business development, who first began developing the **prepaid** program for SNET in 1995.

...SNET Avoids Installing Software on **Network** or Debit Phones

SNET is using a service bureau, which operates a switch-based system

...

**4/K,3/5 (Item 2 from file: 636)**

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

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02409250 Supplier Number: 44775317 (USE FORMAT 7 FOR FULLTEXT)

**SPRINT, MCI SOAR, AT&T FALTERS IN DEBIT CARD RACE**

The Report on AT&T, v12, n12, pN/A

June 20, 1994

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 2250

... Sprint's Carlson, "we certainly encourage their use" because it adds to the carrier's **network usage** .

Any way you slice it, Stebel concludes, **prepaid** calling cards "should get to be very large in this country."

**4/K,3/6 (Item 1 from file: 148)**

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2005 The Gale Group. All rts. reserv.

09324364 SUPPLIER NUMBER: 19043937 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Calling party pays, prepaid may be answer to reduce churn, open revenue streams.**

Mobile Phone News, v14, n47, p5(2)

Nov 25, 1996

ISSN: 0737-5077 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 447 LINE COUNT: 00041

... additional revenue source from non-traditional outlets, a way to reach other segments and increased **network usage** . Subscriber benefits include cost control; greater availability and convenience; and it

encourages them to publish their phone numbers, Sosa said.

... **Prepaid** for Outgoing, Calling Party Pays for Incoming Calls  
Sosa suggested using prepaid for outgoing calls...

4/K,3/7 (Item 2 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

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05540133 SUPPLIER NUMBER: 11657031 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Editorial comment. (prepaid passwords) (Price Watch)**

Database Searcher, v7, n8, p35(1)

Oct, 1991

ISSN: 0891-6713

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT

WORD COUNT: 181

LINE COUNT: 00015

TEXT:

...alerting users when they have used 80 percent of the money, online "resellers" or library **network** distributors who bought packages of **Prepaid** Passwords could not monitor **usage** after distribution to clients. Nor does DIALOG's **Prepaid** Password system allow for the refund of unused monies. Resellers could, however, "mark up" the...

4/K,3/8 (Item 1 from file: 810)

DIALOG(R)File 810:Business Wire

(c) 1999 Business Wire . All rts. reserv.

0775909 BW1292

~~SUBSCRIBER COMPUTING: Subscriber Computing Inc. Installs Real-Time Information System Suite For Douglas Telecommunications Inc.~~

November 19, 1997

Byline: Business Editors

...prepay  
and fraud control systems. FraudWatch is a fraud profiling solution that efficiently detects fraudulent **usage** on a carrier's cellular **network** .

PrePay is a cost-effective, software-based **prepaid** metered billing solution that enables carriers to provide cellular/PCS services to practically anyone while...

? t s4/k,9/all

4/K,9/1 (Item 1 from file: 9)

DIALOG(R)File 9:Business & Industry(R)

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1756347 Supplier Number: 01756347 (THIS IS THE FULLTEXT)

**STC Sees Strong Demand For Rental Phones**

(Thorn Americas and Shares Technologies Cellular have extended agreement they hope will place more prepaid cellular into users' hands)

Wireless Week, p 45+

February 24, 1997

DOCUMENT TYPE: Journal ISSN: 1085-0473 (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 645

ABSTRACT:

Hoping the end results in more prepaid cellular phone users, Thorn Americas Inc and Shared Technologies Cellular Inc (STC) have an extended agreement. Thorn is offering intelligent ~~"rent-to-own"~~ phones via its Rent-A-Center locations across the US. STC is one of the two resellers supplying programming, activation and airtime redemption services. The expanded project will deploy 13,000 debit phones in 800 locations by the middle of March 1997. Currently, Rent-A-Center offers the rent-to-own phones from \$9.99 to \$17.99 per week, contingent upon the market. Reportedly, prepaid rates may seem expensive compared to traditional cellular, however, this is misleading. According to Sean Hayes, executive vice president at STC, the only thing a user looks at is the per-minute rate. However, the economics are not that bad when total user costs are examined. Without contract commitments, it is an affordable alternative for consumers. The article provides additional information on the agreement between Thorn Americas and Shared Technologies.

TEXT:

By Mark Dziatkiewicz

Putting prepaid cellular phones into more users' hands is the expected outcome of an extended agreement between Thorn Americas Inc. and Shared Technologies Cellular Inc.

Thorn Americas offers intelligent "rent-to-own" phones through its Rent-A-Center locations nationwide. STC is one of two resellers providing programming, activation and airtime redemption services. The expanded program will deploy 13,000 debit phones in 800 locations by mid-March.

"It's definitely a business that our customers are in need of and have accepted from us," said Bob Rubinoff, vice president of merchandising for Thorn Americas. Attracting new customers has been a pleasant side effect. "In some cases they are coming in just to rent the phone." Sean Hayes, executive vice president at STC, isn't surprised at the pent-up demand. "Anywhere from 40 percent to 45 percent of clients applying for [wireless] service get refused," he said. "It's not bad credit, it's just not enough credit. If you can afford a gold card you can get cellular, but how many people in America can get a gold card?"

~~Rent-A-Center offers rent-to-own phones from \$9.99 to \$17.99 a week,~~ depending on the market. Per-minute airtime charges vary as well. "We're on our way to one price for the rental and airtime, but we're not there today," Rubinoff added.

~~Customers purchase airtime in 30- or 60-minute increments. Since the intelligent phone tracks the usage,~~ customers appear as "normal" cellular users to the network. This differs from many prepaid carrier services requiring network-based account verification and potential delays. "That's a big advantage over the local carrier," claimed Hayes.

~~When usage credits are depleted, the phone prompts customers to return to Rent-A-Center to purchase additional airtime. Emergency 911 and repair 611 calls are free at all times.~~

~~Prepaid rates may appear costly compared to traditional cellular, but that's misleading, according to Hayes. "The only thing a consumer looks at is the per-minute rate. But the economics aren't that bad if you look at the total user costs."~~ Without contract commitments, it is an affordable customer alternative.

The Rent-A-Center debit phone program began with a two-market test in

November 1995. Although he declined to provide customer counts or market specifics, Rubinoff indicated the program is available in 95 percent of its markets today. "We have some issues in places where we cannot get the proper coverage on the phones," he said.

STC helps fill the gaps by providing nationwide coverage at a single price point. A reseller in more than 640 of the approximately 958 U.S. cellular geographical service areas, STC concentrates on the short-term and prepaid cellular niche.

"We are a service company, we cover 94 percent of the U.S. population and have the volume nationwide to keep the prices low," Hayes explained. That's an attractive combination for nationwide retailers, which have stayed away from cellular and the nightmare of dealing with multiple carriers and pricing plans.

"End users aren't getting the benefits of the Sears and Kmart's. Put those kinds of retailers in my kind of a program-nationwide with consolidated buying power-and my customers will benefit," he added.

As an added incentive, STC offers retailers a revenue-sharing opportunity based on continued airtime sales. "Retailers aren't making any money on cellular. They make a one-time transaction fee for a normal customer," he continued.

Hayes said he sees all of wireless going to pay-as-you-go or pay real-time, because of the bad debt carriers are eating. "It's the ideal candidate because of the nature of the beast. You have individual users, you don't know where they are and whether you're going to collect money from them."

Neither Rubinoff or Hayes could predict the effect of personal communications services entrants on the prepaid market, but both agree it's expanding nonetheless. "Not everyone is going to qualify [for service]," he concludes. "I'm a reseller, as the market prices come down so will I. I look forward to PCS."

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COMPANY NAMES: SHARED TECHNOLOGIES CELLULAR INC (SHARED TECHNOLOGIES INC)  
; THORN AMERICAS INC (THORN EMI PLC)  
INDUSTRY NAMES: Mobile communications; Telecom equipment;  
Telecommunications  
PRODUCT NAMES: Cellular phones (366308)  
CONCEPT TERMS: All company; All intellectual property; Distribution  
license; Orders  
GEOGRAPHIC NAMES: North America (NOAX); United States (USA)

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...Customers purchase airtime in 30- or 60-minute increments. Since the intelligent phone tracks the **usage**, customers appear as "normal" cellular users to the **network**. This differs from many **prepaid** carrier services requiring **network**-based account verification and potential delays. "That's a big advantage over the local carrier..."

4/K,9/2 (Item 1 from file: 621)  
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)  
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01428972 Supplier Number: 46722851 (THIS IS THE FULLTEXT)  
Centigram, Priority Call Management Team to Provide PageNet With Integrated

**Wireless Communications Solutions; MobileManager Selected After Extensive 60-Day, Side-by-Side Market User and Technology Showdown.**

Business Wire, p09191060

Sept 19, 1996

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 815

TEXT:

SAN FRANCISCO--(BUSINESS WIRE)--Sept. 19, 1996--In order to provide Paging Network, Inc.'s (PageNet) 7.9 million North American wireless communications customers with advanced mobile communications solutions, PageNet today said that it will purchase Centigram's MobileManager suite of applications.

PageNet expects to test these enhanced services on a limited basis this year, and is considering future widespread commercial deployment.

MobileManager is the technology platform created by the Centigram and Priority Call Management partnership. After a 60-day, side-by-side, competitive market user and technology trial, PageNet selected MobileManager as its enhanced services platform of choice.

"The suite of advanced applications delivered by Centigram and Priority lets us offer leading-edge solutions to our subscribers," said Bill Scott, PageNet vice president of Systems and Technology. "We believe these solutions may add significant value to PageNet services."

"We see significant potential for these types of enhanced services in the wireless market, particularly among business users and highly mobile professionals," said Janet Constantin, senior analyst, Wireless/Mobile Communications, The Yankee Group. "By offering enhanced services such as those delivered by Centigram and Priority, carriers like PageNet have the opportunity to differentiate themselves in an increasingly competitive marketplace."

This announcement marks one of Centigram's and Priority's growing number of joint customers. Since 1995, Centigram and Priority have had a joint marketing agreement to deliver industry-leading wireless applications based on Centigram's Series 6 and Priority's ORYX platforms.

"We are pleased that PageNet, the world's leading wireless messaging company, has chosen MobileManager over some tough competition, and we believe this is a strong indicator of the growing need for advanced applications in an increasingly competitive marketplace," said Dana Hooper, Centigram vice president of Marketing and Business Development.

"The ability to make and receive important telephone calls easily from any location is critical when choosing a wireless service provider," said Andrew Ory, Priority's founder and president. "This announcement signifies a major opportunity for PageNet to maintain its leadership position by delivering new enhanced services to subscribers faster and more economically than ever before possible, and we are pleased to be working with them."

**MOBILEMANAGER APPLICATION SUITE**

The MobileManager product mix includes Personal Number, Debit Card, Prepaid Cellular, Credit/Calling Card, and Callback services. Personal Number Service integrates voice, fax and "follow me" capabilities into a single telephone number, such as a subscriber's established pager number. Debit Card Service allows **network** operators to provide **prepaid** toll calling and basic **network** services to customers.

**Prepaid** Cellular Services monitors all incoming and outgoing cellular airtime and debits the **usage** against the subscriber's balance that has been paid in advance. It can be offered to customers with little or poor credit history, as well as to short-term subscribers such as vacationers and convention attendees.

Credit/Calling Card Service lets subscribers bill calls to a corporate calling card and provides call rating back to the corporation in real time. Callback Service lets customers call around the world from anywhere using

lowest cost dial tone, least call routing, and prepaid or credit/calling card billing.

PAGING NETWORK, INC.

Dallas-based PageNet (NASDAQ:PAGE) is the world's largest and fastest growing wireless messaging company, providing services to 7.9 million subscribers across the United States through 95 sales and service offices, 6,000 resellers and a growing number of national and regional marketing affiliates. PageNet provides alphanumeric and numeric messaging services with local, regional and nationwide coverage options. News and stock updates, voice mail, fax forwarding and wireless data transmission to mobile computers are also available to PageNet subscribers.

PRIORITY CALL MANAGEMENT

Priority of Wilmington, Mass., is a global provider of intelligent communications platforms. Priority's switch-based platforms are currently used by major corporations and wireless and wireline network service providers in markets including North America, Europe, Africa, Asia and South America. Priority's ORYX platform offers one-number, voice dialing, pre-paid/calling card, international calling, integrated messaging access, and additional value-added applications to support today's virtual office workers.

CENTIGRAM COMMUNICATIONS CORPORATION

Centigram (NASDAQ:CGRM) is a leading global provider of wireless and wireline communications solutions. Centigram delivers communications solutions by integrating voice, data and facsimile on its Series 6 communications server, and by providing access to this multimedia information through a telephone or PC. The Series 6 platform is based on industry-standard hardware and software. Centigram also licenses TruVoice, its patented text-to-speech software.

Centigram is headquartered at 91 East Tasman Drive, San Jose, Calif., 95134. Phone 408/944-0250, fax 408/428-3732, World Wide Web <http://www.centigram.com>. Centigram has sales and support offices in North America, Europe, Asia, Latin America, and Australia. -0-

Note to Editors: Centigram and TruVoice are registered trademarks of Centigram Communications Corporation. ORYX is a trademark of Priority Call Management.

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PUBLISHER NAME: Business Wire

COMPANY NAMES: \*Centigram Communications Corp.; Paging Network Inc.

EVENT NAMES: \*430 (Capital expenditures); 610 (Contracts & orders received)

GEOGRAPHIC NAMES: \*1USA (United States)

PRODUCT NAMES: \*4838000 (Radio & Television Services NEC); 7372620 (Network Software)

INDUSTRY NAMES: BUS (Business, General); BUSN (Any type of business)

NAICS CODES: 51339 (Other Telecommunications); 51121 (Software Publishers)

TICKER SYMBOLS: CGRM; PAGE



... single telephone number, such as a subscriber's established pager number. Debit Card Service allows **network** operators to provide **prepaid** toll calling and basic **network** services to customers.

**Prepaid** Cellular Services monitors all incoming and outgoing cellular airtime and debits the **usage** against the subscriber's balance that has been paid in advance. It can be offered...

4/K,9/3 (Item 2 from file: 621)  
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)  
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01397416 Supplier Number: 46491304 (THIS IS THE FULLTEXT)  
**Centigram Provides Next Generation of MobileManager Applications for  
Service Providers; New Features in Prepaid Cellular, Debit Card  
Services Meet Needs of Today's Users While Increasing Network Usage .**

Business Wire, p6251069

June 25, 1996

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 626

TEXT:

DALLAS--(BUSINESS WIRE)--June 25, 1996-- Centigram Communications Corp. (NASDAQ: CGRM), a leading global provider of communications solutions, today announced the next generation of its MobileManager applications for cellular and wireline service providers worldwide.

The new applications, Prepaid Cellular and Debit Card services, join Centigram's growing line of MobileManager applications, which offer enhanced service to end users and result in increased airtime for carriers.

Prepaid Cellular Service has been introduced at several customer sites to penetrate new markets and protect cellular revenues through advance payment for service.

Prepaid Cellular monitors all incoming and outgoing cellular airtime and debits the usage against the subscriber's balance that has been paid in advance. It can be offered to customers with little or poor credit history, as well as to short-term subscribers such as vacationers and convention attendees.

Carriers can combine PrepaidCellular with other MobileManager applications, such as Debit Card and Personal Number services, as well as voice mail.

Debit Card Service allows network operators to provide prepaid toll calling and basic network services to customers.

Personal Number Service enables subscribers to have a single telephone number, which will seamlessly route communications to people on the move at their mobile, office and home telephone numbers, pager and any other number in the world.

"Prepaid Cellular Service allows providers to grow their businesses by expanding their pools of prospective customers, as well as protects carriers against customers who might extend their network usage beyond , their ability to pay," said Dennis Barsema, senior vice president of worldwide sales.

"Through these applications, those customers who are 'credit challenged' and may not otherwise qualify for service can now gain access to cellular airtime. Our customers tell us that anywhere from 30 to 60 percent of cellular applicants do not meet credit requirements."

Other prepaid services allow carriers to offer short-term promotional and convenience products, such as Prepaid Student Services. Additional services include Prepaid Advertising Fulfillment, Circle of Friends Calling and Budgeted Field Service Calling.

Subscribers hear the status of their account when they log on and can make multiple calls during a prepaid connection. This service can be

accessed from any phone and can have prompts designated in various languages for worldwide markets.

Prepaid Cellular, Debit Card, Personal Number, Credit/Calling Card, and Callback services make up the MobileManager product mix. Credit/Calling Card Service lets subscribers bill calls to a corporate calling card and provides call rating back to the corporation in real time. Callback Service lets customers call around the world from anywhere using lowest cost dial tone, least call routing, and prepaid or credit/calling card billing.

All MobileManager applications are designed to run with the Series 6 communications server and are backward compatible to also serve the large installed base on Centigram's previous platform release.

Centigram is a leading global provider of communications solutions. Centigram delivers communications solutions by integrating voice, data and facsimile on its Series 6 communications server and by providing access to this multimedia information through a telephone or PC.

The Series 6 platform is based on industry-standard hardware and software. Centigram also licenses TruVoice, its patented text-to-speech software.

Centigram is headquartered at 91 East Tasman Drive, San Jose, Calif. 95134. Phone 408/944-0250, fax 408/428-3732, World Wide Web <http://www.centigram.com>. Centigram has sales and support offices in North America, Europe, Asia, Latin America and Australia. -0-

Note to Editors: Centigram and TruVoice are registered trademarks of Centigram Communications Corp. MobileManager is a trademark of Centigram Communications Corp. MobileManager services are provided through a strategic alliance between Centigram Communications Corp. and Priority Call Management of Wilmington, Mass.

CONTACT: Centigram Communications Corp.

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PUBLISHER NAME: Business Wire

COMPANY NAMES: \*Centigram Communications Corp.

EVENT NAMES: \*240 (Marketing procedures)

GEOGRAPHIC NAMES: \*1USA (United States)

PRODUCT NAMES: \*4811801 (Cellular Telephone Services)

INDUSTRY NAMES: BUS (Business, General); BUSN (Any type of business)

NAICS CODES: 513322 (Cellular and Other Wireless Telecommunications)

TICKER SYMBOLS: CGRM

**Centigram Provides Next Generation of MobileManager Applications for Service Providers; New Features in Prepaid Cellular, Debit Card Services Meet Needs of Today's Users While Increasing Network Usage .**

4/K,9/4 (Item 1 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

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03222550 Supplier Number: 46606471 (THIS IS THE FULLTEXT)

**CARRIERS RECOGNIZE NEED FOR PREPAID SERVICE OFFERING**

Mobile Phone News, v14, n31, pN/A

August 5, 1996

ISSN: 0737-5077

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 706

TEXT:

More and more cellular carriers are jumping on the "prepaid cellular bandwagon." A recent canvas by MPN found that a number of carriers are offering some type of prepaid plan or are testing the numerous systems on the market.

While many carriers said they offer the prepaid option to potential customers who fail the credit check portion of the application process, they do not advertise the plan. For example, U S West Cellular (using the AirTouch Cellular brand name) has ChargeAlong, which complements its TalkAlong product, said spokeswoman Lisa Bowersock. The phone-in-a-box TalkAlong product requires a credit card, but for those who do not have a major credit card, Bowersock said, U S West offers them ChargeAlong.

Other carriers aggressively market prepaid cellular as a service option. Ameritech Cellular Services is the latest U.S. carrier to do this, but the company declined to say what technology is being used to offer the service. The Ameritech PrePaid Cellular service is available in Chicago. Unlike those carriers that offer prepayment to applicants who do not meet credit criteria, Ameritech is targeting beyond the poor credit market, marketing the service to budget-conscious families, businesses that want to restrict employees' use of the phones and parents who want the safety of cellular phones along with a way to limit their use, the company said.

To activate the prepaid service, users purchase a disposable card with \$30 worth of prepaid airtime. After the data from the card is entered during the first call, the customer can throw away the card and use the phone freely until the dollar amount is used. After that, customers can add airtime with a credit card by dialing "\*PAY." Airtime must be purchased in blocks of \$30. Airtime can be purchased with cash at any Ameritech authorized retail center.

SNET Mobility also introduced a prepaid service in July. SNET is offering the "Wireless Advance" service in Connecticut, western and central Massachusetts, Rhode Island and New Bedford, Mass. SNET tested the system for a couple of months, aiming the service primarily at "credit-challenged" customers, but SNET is offering the commercial product to a broader market beyond the 20 percent to 30 percent of denied applications.

"We truly believe there is a broader market for **prepaid** --those who wish to control **usage**," said Jim D'Apirle, manager of business development, who first began developing the **prepaid** program for SNET in 1995.

...SNET Avoids Installing Software on **Network** or Debit Phones

SNET is using a service bureau, which operates a switch-based system. D'Apirle declined to say which company SNET is using. He did say that he preferred using the service bureau rather than making the commitment to one system by installing it on the SNET network. He said he did not choose the debit phone route because he feared that those phones eventually would be compromised by fraudsters looking for free airtime.

Customers buy airtime in increments of \$50. D'Apirle said the \$50 blocks were chosen because they are easier to manage for inventory purposes. Also, because the average bill in the industry is around \$50 per month, \$50 increments seemed a logical choice, he said.

American Cellular Rental (ACR) also joined the prepaid movement. Unlike Ameritech, which is targeting consumers, ACR is marketing the service to retailers and dealers to sell to consumers. ACR first announced its prepaid plans in April (MPN, April 29). But recently, the Fort Lauderdale, Fla.-based company officially launched the CashPhone national prepaid cellular program. CashPhone has 15,000 customers and is adding about 1,000 new customers a week.

To make its coverage nationwide, ACR signed several resale agreements, the latest of which was with U S West Cellular. ACR also has resale arrangements with BellSouth Mobility, Bell Atlantic Nynex Mobile,

Ameritech, Comcast Cellular and Southwestern Bell Mobile Systems. The service is available in 85 percent of the U.S. markets and will be in every market by the fourth quarter.

The CashPhone is JRC International Inc.'s 830 model--JRC offers debit phones, but the 830 is not one of those. The 830 has been slightly reconfigured so that calls are routed to ACR's debit switch. ACR uses a switch-based prepaid platform designed specifically for ACR's system.

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Subscription: \$697 per year as of 1/97. Published weekly. Contact Phillips Business Information, Inc., 1201 Seven Locks Road, Potomac, MD 20854. Phone (301) 424-3338. Fax (301) 309-3847.

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PUBLISHER NAME: Phillips Business Information, Inc.

INDUSTRY NAMES: BUSN (Any type of business); TELC (Telecommunications)

... to 30 percent of denied applications.

"We truly believe there is a broader market for **prepaid**--those who wish to control **usage**," said Jim D'Apirle, manager of business development, who first began developing the **prepaid** program for SNET in 1995.

...SNET Avoids Installing Software on **Network** or Debit Phones

SNET is using a service bureau, which operates a switch-based system

...

4/K,9/5 (Item 2 from file: 636)

DIALOG(R) File 636:Gale Group Newsletter DB(TM)

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02409250 Supplier Number: 44775317 (THIS IS THE FULLTEXT)

**SPRINT, MCI SOAR, AT&T FALTERS IN DEBIT CARD RACE**

The Report on AT&T, v12, n12, pN/A

June 20, 1994

ISSN: 0741-8361

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 2250

TEXT:

Pre-paid calling cards, debit cards, coin calling cards, telecards. Call them what you will, but interexchange carriers are finding that these decidedly low tech consumer products are a gold mine whose revenue-producing potential has barely been tapped in this country.

But the big three carriers won't have the market to themselves, experts tell The Report on AT&T. And it's venerable AT&T - not Sprint or MCI- that has the most catching up to do.

While common in Europe and Japan for almost two decades, the cards have been introduced in this country only over the past couple of years. Industry observers expect they will become very popular with travelers, military personnel, college students and anyone else who doesn't want to dig around in pockets or purses for change to make calls when they're on the road.

The cards are being used by businesses in promotional tie-ins for everything from greeting cards to frozen lasagna to women's bras. If there is a market niche out there to be exploited, it is only a matter of time before someone will issue a prepaid calling card that will appeal to that targeted demographic group.

AT&T has had the most troubled history with its prepaid products. Although the carrier came out with a consumer card in May 1992, it has done very little with the product since then. There are no AT&T cards for business customers, and the carrier's international offerings are limited.

According to Marc Ostrofsky, publisher of Public Communications Magazine, AT&T has gone through four managers of its calling card program in the last year.

AT&T markets its cards through its 359 Phone Centers across the country. Its International Consumer Markets division market sells a USADirect Prepaid Card to military and Department of Defense personnel through the Army and Air Force Exchange Service on military bases in Germany, Great Britain and Japan. The cards are used to call the United States.

The three major carriers, says Harris Shapiro, an investment analyst with Whale Securities in New York, face some stiff competition from long distance service resellers who generally offer cards with per unit prices of as low as 35 cents a minute. Because the larger companies are hesitant to lower their calling rates on these cards, he says, they are particularly vulnerable to the aggressive marketing techniques of these smaller competitors.

Nevertheless, prepaid calling cards will generate increasing revenues over the next few years as the general public accepts the concept, more companies get into the game and the collectibles market heats up says Eric Stebel, associate editor of TeleCard World, a trade magazine. Last year, he says, the market for prepaid cards in this country was \$50 million to \$75 million and will explode in the next few years.

Ostrofsky estimates the market will blossom to \$300 to \$400 million this year and should pass the billion dollar mark well before the end of this decade.

Already such companies as Crystal Lite, Pepsi, National Tire Wholesalers, FTD, Playtex bras, Clear Blu Easy (home pregnancy tests) and Budget Gourmet have offered prepaid cards in promotional tie-ins, Stebel said. There have been Marvel comics, Larry Bird, Wayne Gretzky, Roberto Clemente and Dallas Cowboy calling cards, he adds, and there are many more to come. AT&T just came out with a series of cards tied into "The Flintstones" movie.

Paradoxically, these cards may actually increase in value once they have been used up. Card collecting is very popular in Europe and Japan and is expected to become so in this country as well.

The idea behind the prepaid calling card is a rather simple one. Cards are bought for a set price (generally \$5, \$10, \$20 and \$50 which is printed on the card) and entitle the customer to "units" (minutes) of long distance calling time.

To place a call, the customer dials an "800" number on the back of the card, the card's account or personal identification number, and then the number he or she is calling. A computerized "file" is set up for each card sold, and calling time is charged against the account until it is used up.

The real selling points, one MCI spokesman told The Report on AT&T, are there are no operator-based surcharges on placing a call, no invoices at the end of the month and no need to subscribe to the particular long distance carrier to purchase and use the card.

AT&T, MCI, Sprint and a number of smaller carriers have launched versions of the prepaid calling card. Of the three major long distance carriers, Sprint has developed the most ambitious debit card program.

All of Sprint's "market channels" (international, business and domestic consumer) have a debit card program in place, says Robin Carlson, a spokeswoman for the carrier. The company has had an international card on the market since April 1992 and issued cards for domestic customers a year later.

In this country Sprint markets its Instant Foncard through convenience stores and other retail outlets across the country. Last year, the carrier test marketed the card through several convenience store chains in Boston and Philadelphia before making them more widely available across the country, Carlson said.

Focus group surveys conducted at that time, she said, showed that

customers found the cards convenient to use and would buy them again. The cards are projected to big revenue producers in the future, although Carlson could not cite any figures on sales volume.

The cards are also available through Sprint's retail outlets in Florida and will eventually be sold in the company's other stores across the country, she said. The cards can also be bought through an 800 number the carrier has set up.

Even more lucrative at this point, she said, are the promotional tie-ins Sprint has negotiated with a number of other companies.

Earlier this month Hallmark came out with a line of greeting cards that included a 10 minute calling card. Both the card and the prepaid calling card featured the same design and motif. They are available in Hallmark stores nationwide and retail for \$6.

Apple's Claris software arm includes a prepaid Sprint calling card with a customer service number printed on it in each of its software packages for those customers who feel they must talk to someone every time they experience a problem with their computer. This has proven cost effective to the company, Carlson says, because it allows customer service calls to be routed directly to the person best suited to help the customer rather than having the call handed off from one department to another.

Carlson expects debit cards with pre-determined numbers printed on them to become a standard item included in many packaged products over the next few years. For a few dollars that can be factored into the product's retail price, she says, companies better serve their customers while providing them with a little peace of mind.

As an example, she said, a number of airlines give debit cards to passengers should their flight be canceled. The cards, she said, can then be used by the passenger to call ahead to his or her destination to let friends, family or business associates at that end know they will be late. Several airlines give cards with their logo emblazoned on them to first or business class passengers.

Overseas, Sprint has agreements with Travelex to sell its prepaid cards at its foreign currency exchange locations in this country, Europe and Asia. Presently, the cards are available at JFK, LaGuardia and Newark airports in the New York metropolitan area and airports in Florida, Las Vegas and other cities.

In Great Britain, the cards are sold at Heathrow, Gatwick, Birmingham and Aberdeen airports, a number of tourist attractions such as the Tower of London and the ports of Dover and Hull. The cards are also available at Frankfurt Airport in Germany and later this year will be available throughout the Pacific Rim.

Also in Europe, Gastaldi Tours in Italy, which packages group tours to the United States, gives all of its customers Sprint debit cards. Rail Europe puts a Sprint debit card, a Green Michelin guide, shopping discount coupons and an updated list of events in destination cities in a packet it gives to all of its passengers.

Sprint's debit cards are available in more than 40 countries, Darian Germain, a spokeswoman for Sprint's international division, told RATT. Rather than an 800 number, the cards have the international access code of that country printed on them, she says.

In a unique twist, Sprint cards are being used by Overseas Chinese in this country to circumvent China's prohibition against foreign-based carrier's building facilities in that country. Expatriates in the United States buy Chinese language cards here and then mail them to family and friends in China to use for calls to the United States.

MCI is the newest player in the prepaid calling card market. The carrier came out with its branded card for consumers in March and a card targeted at business customers earlier this month.

MCI says it offers its cards to customers through the 40,000 nationwide outlets that are part of the Integrated Payment System network that markets American Express Money Orders and Moneygrams. The network

includes convenience stores, groceries, banks, travel agencies, check cashing outlets, drug stores and postal outlets. While Sprint offers its cards in more than a dozen languages, MCI only offers cards in English and Spanish. But "systems are in place to do other language cards as needed," says David Sutton, an MCI spokesman.

MCI's consumer division has forged no promotional tie-ins yet, says Kate Fralin, a spokeswoman with the carrier's consumer markets division. The carrier does not yet have an international card, but "we are looking into it," says another spokesman.

A unique feature of the domestic MCI PhoneCash card is customers can dial an 800 number on the back of the card to receive travel-related information and assistance such as restaurant referrals, weather reports, current exchange rates and other services 24 hours a day. The cards are also sold through an 800 number the carrier has set up.

MCI offers business customers two options: a promotional card upon which MCI customers can have their corporate name, logo, colors and other graphics printed and a regular debit card for employees.

The promotional cards can be given to customers as premiums or can be packaged with products to be used to call a pre-determined number for service. The prepaid card can be given to employees who travel only occasionally on business or to part time help who are remotely based but must stay in touch with the home office. These cards eliminate the risk and hassle of obtaining regular calling cards for such employees.

There are a number of built-in benefits to using such cards says David Brock, a spokesman for MCI business markets. They include:

- Because the cards are prepaid they can be factored into the monthly budget;
- The company's exposure to fraudulent use of a lost or stolen card is limited to whatever units are left on the card;
- The cards can be used as incentives to employees for outstanding performance;
- Cards with the company's logo imprinted on them create greater market visibility;
- There is no ongoing hassle of verifying expenditures on a company-owned calling card.

The three carriers have set up the programs supporting their plastic cards, about the size and shape of a bank ATM card, (MCI's card is a thin laminated "plasticized paper") generally along the same lines. Units of calling time go for 60 per minute, although Sprint discounts the per minute price with its higher denomination cards (for example, units go for 50 cents a minute on a \$50 card).

As a caller nears the end of the time left on his or her card, a computerized voice or a "bong" announces there is first two minutes left and then one minute left. The call is terminated when time runs out on the card.

All of the cards are disposable because as Sprint's Carlson told RATT, "retailers want something that will bring people back into the store." Lest a customer buy a card to squirrel it away for eventual use years in the future, each of the carriers has incorporated an expiration date into each card. Generally each card has an activation cycle of about one year to 18 months before it no longer is usable.

But the really big money promises to be in the collectibles market, which has just begun to develop in this country. There are trade shows popping up across the country and three monthly magazines cover the industry.

In Europe, where prepaid cards have been available for almost 20 years, there are estimated to be 1 million collectors. During the first two years after the cards were introduced in Japan about 10 years ago, more than 200 million cards were sold. They are also a hot collectors item there as well.

While there are no hard figures on how many people buy cards and then

stick them in their collections without ever using them, Shapiro estimates 20 percent of all cards purchased wind up unused in someone's collection.

"While we don't know how many people fail to use their cards," says Sprint's Carlson, "we certainly encourage their use" because it adds to the carrier's **network usage**.

Any way you slice it, Stebel concludes, **prepaid** calling cards "should get to be very large in this country."

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Subscription: \$697 per year as of 1/92. Published Mondays, 24 times per year. Contact Telecom Publishing Group, 1101 King Street, P.O. Box 1455, Alexandria, VA 22313-2055. Phone (703) 683-4100. FAX (703) 739-6490.

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PUBLISHER NAME: Telecom Publishing Group  
EVENT NAMES: \*360 (Services information)  
GEOGRAPHIC NAMES: \*1USA (United States)  
PRODUCT NAMES: \*4811000 (Telephone Service)  
INDUSTRY NAMES: BUSN (Any type of business); TELC (Telecommunications)  
NAICS CODES: 51331 (Wired Telecommunications Carriers)

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Any way you slice it, Stebel concludes, **prepaid** calling cards "should get to be very large in this country."

4/K,9/6 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
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09324364 SUPPLIER NUMBER: 19043937 (THIS IS THE FULL TEXT)  
**Calling party pays, prepaid may be answer to reduce churn, open revenue streams.**  
Mobile Phone News, v14, n47, p5(2)  
Nov 25, 1996  
ISSN: 0737-5077 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 447 LINE COUNT: 00041

TEXT:

An estimated 50 percent of customers leave a cellular carrier because of perceived high cost, according to Roger Sosa, product manager-wireless interconnect services for Ameritech Information Industry Services (AIT), which offers calling party pays administration to cellular and paging carriers.

Another 20 percent leave because they experience poor voice quality, Sosa said, while 10 percent leave due to poor customer service. Five percent leave over frustration with inaccurate billing and 15 percent is structural - i.e. the customer moves out of a service area or dies, he said.

Sosa estimated that the average cellular carrier loses its entire base of subscribers every three to five years. With acquisition costs averaging \$400 per subscriber, it is no wonder that churn is such a concern.

Sosa recommended that carriers try to simplify pricing plans, reduce the perceived cost, offer loyalty programs and innovative products and services. Calling party pays is another good way to reduce perceived cost and keep churn down. While many countries have embraced calling party pays, the United States has been hesitant to adopt it.

Some of the benefits of calling party pays, Sosa cited, include lower billing costs, less exposure to credit risks, additional revenue source from non-traditional outlets, a way to reach other segments and increased **network usage**. Subscriber benefits include cost control; greater



availability and convenience; and it encourages them to publish their phone numbers, Sosa said.

... **Prepaid** for Outgoing, Calling Party Pays for Incoming Calls

Sosa suggested using prepaid for outgoing calls and calling party pays for incoming calls. Prepaid also is one way carriers can lower acquisition costs, according to David Raehpour, director-North American sales for Brite Voice Systems Inc. (BVSI), which offers a switch-based platform to carriers interested in providing prepaid services through their cellular networks.

David Rulien, president of American Cellular Rental (ACR), which provides prepaid service through its own proprietary switch, expects the prepaid cellular market to be a \$1 billion business by 2000.

Raehpour listed several special considerations wireless carriers must recognize when planning a prepaid cellular offering: programmable prompts or notifications by service plan; multiple language capability; fraud control features; inventory management; realized revenue reporting; taxation issues; audit trail capability; and redundancy, high availability and fault tolerance.

Based on ACR's experience, Rulien stressed the importance of being able to provide a call detail record because people will not believe they used up their prepaid airtime. Since these records can be expensive, ACR has a policy to provide one free record a month and additional copies for a fee, Rulien said.

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INDUSTRY CODES/NAMES: TELC Telecommunications; BUSN Any type of business  
DESCRIPTORS: Cellular telephone services industry--Services  
PRODUCT/INDUSTRY NAMES: 4811801 (Cellular Telephone Services); 9914380 (Customer Relations)  
SIC CODES: 4812 Radiotelephone communications  
FILE SEGMENT: TI File 148

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... **Prepaid** for Outgoing, Calling Party Pays for Incoming Calls

Sosa suggested using prepaid for outgoing calls...

4/K,9/7 (Item 2 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB  
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05540133 SUPPLIER NUMBER: 11657031 (THIS IS THE FULL TEXT)

**Editorial comment. (prepaid passwords) (Price Watch)**

Database Searcher, v7, n8, p35(1)

Oct, 1991

ISSN: 0891-6713

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT

WORD COUNT: 181

LINE COUNT: 00015

TEXT:

Because Prepaid Password programming does not allow maintenance of accounting records beyond alerting users when they have used 80 percent of the money, online "resellers" or library **network** distributors who bought packages of **Prepaid** Passwords could not monitor **usage** after distribution to clients. Nor does DIALOG's **Prepaid** Password system allow for the refund of unused monies. Resellers could, however, "mark up" the price, though true costs display on screen for Prepaid Passwords the same as open-ended ones. Attentive searchers might keep their own running tabulation. DIALOG will not "mark up" the online cost display.

According to a DIALOG representative, invoice generation to support monitoring or refunds would require new system development not currently scheduled. Prepaid Password programming also does not allow special notices with customized contact information when users hit the 80 percent point, e.g., "Warning! You are running low on search funds. Time to renew with your friends in Search Central (ext.###)." With substantial interest and possible outside support, however, DIALOG might consider upgrading the Prepaid Password programming.

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INDUSTRY CODES/NAMES: LIB Library and Information Science  
DESCRIPTORS: Passwords--Prices and rates; Information storage and retrieval systems--Prices and rates  
SIC CODES: 7375 Information retrieval services  
TRADE NAMES: DIALOG (Online information service)--Prices and rates  
FILE SEGMENT: TI File 148

TEXT:

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4/K,9/8 (Item 1 from file: 810)  
DIALOG(R)File 810:Business Wire  
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0775909 BW1292

**SUBSCRIBER COMPUTING: Subscriber Computing Inc. Installs Real-Time Information System Suite For Douglas Telecommunications Inc.**

November 19, 1997

Byline: Business Editors  
Dateline: IRVINE, Calif.  
Time: 11:51 PT  
Word Count: 742

IRVINE, Calif.--(BUSINESS WIRE)--Nov. 19, 1997--  
SCI Offers Comprehensive Solution Set To  
Small And Midsize Carriers

Subscriber Computing Inc. (SCI) Wednesday announced that it has deployed a suite of real-time information systems for Douglas Telecommunications Inc., a CellularOne operator serving markets in Georgia, Illinois and West Virginia.

Douglas purchased SCI's Intelligent Message Router (IMR), FraudWatch, PrePay and CreditWatch systems.

According to Andrew Havlik, customer care manager at Douglas, SCI's product line offers distinct advantages over competitive systems.

"SCI provides a financially viable, integrated suite of solutions for the small and midsize carrier," said Havlik. "Douglas' markets and licensees already benefit from quick response to competitive issues, rapid resolution of systems problems and flexibility in dealing with day to day occurrences.

"The SCI system further enhances these capabilities by enabling us to manage fraud and bad debt and to provide our customers with a prepay option. SCI is the only company we found that can provide these

*Date is good  
per Sam  
2/25/05  
one day is OK  
11/19/97  
11/20/97 PCT*

types of solutions to carriers our size."

"The platforms and pricing structures of competitors' offerings are generally directed towards the larger, regional and nationwide carriers," said Alan Van Boven, SCI vice president and general manager, real-time systems division. "With SCI, both large and small carriers can be cost effectively served. SCI's product scalability provides second- and third-tier carriers the opportunity to deploy technologies that otherwise would not be obtainable given the fiscal constraints of a smaller cellular operation or a PCS carrier in the midst of a build-out."

With the SCI system, Douglas has the ability to rate and post call detail records (CDRs) from roaming prepay and credit monitoring subscribers in near real-time, a feature not offered by most competitive systems. The feature greatly enhances the effectiveness of the system.

SCI's cellular and PCS solution offerings include real-time subscriber data management, fraud management and prepaid metered billing, as well as credit management. In addition, SCI offers a customer care and billing solution widely used by wireless carriers around the world.

"What impressed us about SCI even more than their top-notch products was the company's commitment to our schedule," said Havlik. "Our launch date for prepay service posed a real problem in that hardware required to complete the installation had to be delivered in the midst of the UPS strike."

"Rather than sliding the delivery date, SCI rented a U-Haul truck and hired a driver who delivered the system across the country to us, right on target. The installation went off without a hitch, and we were live on August 22, as planned."

SCI's IMR is a high-performance mediation system that collects subscriber usage data, filters and formats that data, and distributes it in real-time to downstream applications including billing, prepay and fraud control systems. FraudWatch is a fraud profiling solution that efficiently detects fraudulent **usage** on a carrier's cellular **network**.

~~PrePay is a cost-effective, software-based prepaid metered billing solution that enables carriers to provide cellular/PCS services to practically anyone while eliminating the risk of bad debt. CreditWatch helps carriers minimize bad debt exposure on home and roaming subscribers. The system provides for the setting of individual credit limits. When these limits are exceeded, a warning is generated.~~

Douglas Telecommunications Inc. is a privately held company with headquarters in the San Francisco Bay area. The company currently operates markets in West Virginia, Georgia and Illinois. Each market is functionally independent, while all management, monitoring and quality assurance remains centralized, which provides a substantial cost savings to the licensee.

~~Douglas is located at 4040 Civic Center, Suite 530, San Rafael, CA 94903.~~

Irvine-based SCI is a rapidly growing provider of customer care and billing, fraud control and real-time mediation software systems for wireless telecommunications carriers worldwide. SCI systems support a wide range of services, including cellular, paging, wireless data, PCS-CDMA, TDMA and GSM.

The company currently services clients on six continents -- Europe, North America, Australia, Africa, Asia and South America. SCI is located at 18881 Von Karman Ave., Suite 450, Irvine, CA 92612. Visit SCI's Web site at <http://www.subscriber.com>.

FraudWatch is a registered trademark of Subscriber Computing Inc. CreditWatch, Intelligent Message Router and IMR are trademarks of

Application Number: 09/586 881

Subscriber Computing Inc.

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KEYWORD: CALIFORNIA WEST VIRGINIA GEORGIA ILLINOIS

INDUSTRY KEYWORD: COMPUTERS/ELECTRONICS COMED TELECOMMUNICATIONS

PRODUCT

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services to practically anyone while...  
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Set	Items	Description
S1	49970	(PREPAID OR PRE-PAID OR "PRE PAID") AND (PHONE OR CELL) NOT PY>1998
S2	35666	(PREPAID OR PRE-PAID OR "PRE PAID") (20N) (PHONE OR CELL) - NOT PY>1998
S3	16	(PREPAID OR PRE-PAID OR "PRE PAID") (10N) NETWORK (10N) US- AGE NOT PY>1997
S4	8	RD S3 (unique items)
?		

Application Number: 09/586 881

Subscriber Computing Inc.

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connie@mcqtr.com

KEYWORD: CALIFORNIA WEST VIRGINIA GEORGIA ILLINOIS

INDUSTRY KEYWORD: COMPUTERS/ELECTRONICS COMED TELECOMMUNICATIONS

PRODUCT

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S4	8	RD S3 (unique items)
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